

Although the species of *Fregata* are not as yet very accurately determined, it is believed that the same species (*Fregata aquila*) is found on both the Pacific and Atlantic shores of Central America.

The eggs of the Crocodile of Jamaica (*Crocodilus acutus*) were also obtained by my brother early in the present year, on that island. They present the elongated oval form peculiar to the Crocodilians. They are of a shining white colour, and measure $3\frac{1}{2}$ inches in length by 2 inches in breadth.

8. ON CHARADELLA AND LICHENELLA, NEW FORMS OF POLYZOA FROM AUSTRALIA. BY DR. J. E. GRAY.

The first coral which I wish to bring before the Meeting is nearly allied to the genus *Amathia*—indeed some naturalists may be inclined to regard it only as a section of that genus; but as it presents a different mode of growth and habit, I think it is desirable that it should be distinguished by a distinctive name.

I may premise that the name of the larger group to which it belongs is the subject of a very unpleasant discussion. Lamouroux and Lamarek both published the genus in the year 1812 under two different names, the first calling it *Amathia* and the second *Serialia*, as is also the case with many other genera established in the same works.

There can be no doubt that these authors studied their subject, and found out what they considered natural groups, and named them, independently. Lamouroux presented his memoir on the subject to the Institute in 1810, and Lamarek was named one of the Commissioners to report on his paper; so that he had the opportunity of knowing what Lamouroux had done two years before the publication of his own work; and this has given rise to Lamarek being charged with pirating the labours of Lamouroux.

But I think any one who has known anything of the character of Lamarek must consider such a charge as groundless; and I merely cite this as an instance of the very unpleasant position in which a naturalist is placed by being called upon to examine and adjudicate on an unpublished paper of another author engaged on the same branch of study; and an opinion on such a subject by one not so engaged is generally worse than useless. I consider this one of the great objections to the system of reference which is so commonly adopted in this country, France, and America.

In France and America they do their best to obviate the evil, by making the names of the referees public, and requiring them to send in a written report, while here the referee is often only known to the officers of the society. Neither system obviates the evil which laid Lamarek open to the unpleasant, and, I believe, ungrounded charge, which has been brought against him, and which may be made against any scientific man who is called upon to read the MSS. communication of another labourer in the same field of study.

Lamouroux named one of the species of *Amathia*, *cornuta*,

because the end of the stem beyond the cluster of cells is produced into two setaceous filaments or tags. If these tags are examined, it will be found that the cells are gradually developed upon them, and they are only the commencements of the next articulations which are to bear the cells. They are to be observed, more or less developed, on all the species I have examined; and when the stem is simple, as in *A. lendigera*, there is a single tag; and when the coral is repeatedly forked, then there are two tags at the end of the last cell-bearing articulation, as is also the case in *A. lendigera*, where a branch is going to be formed. In the genus now noticed, as the branches arise in three, it has three such tags.

CHARADELLA.

Polypidom tree-like, branched; stem formed of numerous tubes, forming at the base an expanded mass of tubes; branches numerous, pinnate or bipinnate, formed of numerous articulations, each articulation throwing off, at its point of junction, two opposite branches formed of a single joint, each joint furnished on its upper edge with a series of small subequal tubular polype-cells.

1. CHARADELLA TRIFIDA.

B.M.

Pale brown; the branches furnished at the end with trifid tags, being the commencement of the branches in process of formation.

Hab. Australia, Portland (*Mrs. Maccloud*).

The coral form a bush 8 or 10 inches high.

The genus *Amathia* of Lamouroux and *Serialia* of Lamarek forms a very natural group, which may be divided into the following genera or subgenera.

I. *Cells simple, in a straight cluster on the joints.*

1. AMATHIA.

Coral creeping; stems rarely forked; joints filiform, the upper half covered with one or two series of cells, terminal joint or tag simple or rarely bifid.

1. AMATHIA LENDIGERA.

B.M.

2. AMATHELLA.

Coral arborescent, erect, repeatedly forked; joints short, rather incurved, covered with one or two series of cells; terminal joints or tags bifid.

* *Cells in two series.*

1. AMATHELLA BISERIALIS, Krauss.

B.M.

Hab. S. Africa.

** *Cells in one compressed series.*

2. AMATHELLA UNISERIALIS.

B.M.

3. CHARADELLA.

Coral arborescent, erect, repeatedly trifid; joints moderate, rather incurved, upper side covered with one or two series of cells; terminal joint or tag trifid.

C. TRIFIDA.

B.M.

Hab. Australia.

II. *Cells simple, disposed spirally on the articulations. Coral arborescent, forked.*

4. SERIALIA.

Coral arborescent, forked; articulation elongate, naked at the tail; cell-bearing above, subspiral; terminal joint bifid.

1. SERIALIA CONVOLUTA.

B.M.

Hab. Van Diemen's Land.

5. SPIRALIA.

Coral arborescent, forked; articulations short, covered with crowded cells, forming together a nearly continuous spiral series of cells on the stem; tags indistinct.

1. SPIRALIA SPIRALIS.

B.M.

2. SPIRALIA UNISPIRALIS.

S. unispiralis, Holdsworth, MSS.

III. *Cells with an elongated horny process on each side, and disposed spirally on the articulations.*

6. CORNALIA.

Coral arborescent, forked; articulations elongate, upper end with a crowded spiral series of cells, each armed with an elongated horny process on the side.

1. CORNALIA AUSTRALASIE.

B.M.

Hab. Van Diemen's Land.

In 1850 Mr. Francis Brent sent me a Coralloid from Western Australia, which is exceedingly peculiar in its character; for though it is evidently allied to *Flustra*, it is so unlike, both in substance and form, any that I have before seen, that I feel assured it must form a distinct genus.

The specimen is not in as good a state as I could wish, I therefore placed it on one side for a time in hope that I might procure other examples that might more completely illustrate its structure; but as they have not occurred, I am now induced to bring it before the Society.

It may be thus described :—

LICHENELLA.

Coral frondose, erect, branched, hard, calcareous, and brittle; the stems and branches are convex on one side, and flat or rather concave on the other; the stem is broad and flat; the branches are narrow, with a more or less expanded thinner margin, which is dilated into broad foliaceous expansions at the tip, which are sometimes proliferous, giving out at the top a thin branch bearing an expanded tip.

The concave surface of the stem and branches are marked with the remains of squarish cells. The expanded ends of the branches are sometimes smooth on both sides; but generally they are marked externally with longitudinal grooves, and on the upper side furnished with longitudinal series of thin, rather calcareous, cells, which are each furnished with a regularly circumscribed roundish mouth closed by a thin membrane marked with a central longitudinal depression. The smooth surface of the coral under the microscope is marked with closed transverse punctated undulated cross lines.

This coral has much more the appearance of a *Lichen* than of a *Flustra*.

1. LICHENELLA BRENTII.

B.M.

Hab. W. Australia (*F. Brent, Esq., 1850*).

The coraloid is so very like the calcareous *Alga* named *Mastophora Lamourouxii* by Descaine, from the same locality, that I am in doubt if it should be regarded as distinct from it. It differs from the usual specimens of that *Alga* in the leaf-like expansions being covered with cells on the upper surface, and longitudinally grooved on the under surface, the grooves forming the ridge between the cells on the upper side, while in the *Alga* both sides of the leafy expansions are smooth like *Pavonia*; but I must at the same time own that there are one or two of the expansions at the top of one or two of the branches that are smooth like the *Alga*.

Can it be a specimen of *Mastophora Lamourouxii* in which the form of the leaves is changed by a parasitical coral, which causes the leaves to be longitudinally radiately grooved?

9. A MONOGRAPH OF THE GENUS KERIVOULA.

BY ROBERT F. TOMES.

(Mammalia, Pl. LXVI.)

The following monograph is one of a series which I have prepared, having for their object the definition of groups or genera rather than the description of the species of which they are composed. This has been done with a view to render less difficult the determination of the species, which difficulty is chiefly felt from the indiscriminate manner in which they are thrown together by some zoologists; the